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00-1071-01.11013

May 3, 2006

Mr. Robert Stone
Hazardous Materials Specialist
Humboldt County Division of Environmental Health
100 H Street, Suite 100
Eureka, CA 95501

Re: First Quarter Monitoring Report 2006, Ferndale High School, Gymnasium, LOP # 12445

Dear Mr. Stone:

The First Quarter 2006 monitoring activities at the above-referenced site were performed on March 24, 2006, as reported herein. The previous quarterly monitoring event (Fourth Quarter 2005) was performed on December 19, 2005. This transmittal includes the following appendices:

Appendix A	Figure 1	Vicinity Map
	Figure 2	Site Map
	Figure 3	Quarterly Monitoring Map
Appendix B	Table 1	Quarterly Hydrographic Data
	Table 2	Quarterly Water Analysis
Appendix C	Field Notes	
Appendix D	Laboratory Reports and Chain-of-Custody Forms	
Appendix E	W&K's Standard Operating Procedures	
Appendix F	Correspondence	

Field Activities

Quarterly monitoring was performed on March 24, 2006. All six site monitoring wells, MW-101 through MW-106, were opened and the depth to water was measured in each. Wells MW-103 and MW-104 were overflowing with water when opened. The dissolved oxygen concentrations were also measured in each well. The hydrographic data, including dissolved oxygen measurements, are listed in Table 1, Appendix B. Wells MW-103 through MW-106 were purged of at least three well volumes and allowed to attain equilibrium prior to sampling. The water chemistry parameters of temperature, conductivity and pH were measured during the purge activities and recorded (see Field Notes, Appendix C). Wells MW-101 and MW-102 are not being sampled at this time. During purge operations, a petroleum-like odor was noted from the water at MW-103, and the odor at wells MW-105 and MW-106 was questionable. A visible sheen was noted on the purge waters at MW-103 and MW-105. There was no measurable free product in any of the wells, and positive responses for hydrocarbons at or above laboratory report limits for the project samples were subsequently noted only at well MW-103.

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The water samples were held in a chilled cooler and submitted to Alpha Analytical Laboratories, Inc. in Ukiah, California, a State certified analytic laboratory, for analysis. The samples were analyzed for Total Petroleum Hydrocarbons as Diesel (TPH-D) and for Motor Oil (TPH-MO) by method 8015DRO (diesel range organics). These analyses included a silica gel screening procedure prior to analysis to remove biological fatty lipids (biological hydrocarbons). The samples were also analyzed for TPH-Gasoline (TPH-G) by method 8260 GRO (gasoline range organics). The BTEX components of Benzene, Ethylbenzene, Toluene, Xylenes, and Methyl-t-Butyl Ether (MtBE) were analyzed by EPA Method 8260B. The analytic results are listed in Table 2, Appendix B. The Laboratory Report and the Chain of Custody are contained in Appendix D.

Hydrographic Data

Table 1, Appendix B contains the tabulated data for depth-to-water measurements, as measured from the top of the casing (toc) for each well. Wells MW-103 and MW-104 were overflowing when opened, and the depth-to-water level for each well was approximated at 0.00 feet. The depth to water otherwise ranged from 1.05 feet in MW-101 to 2.64 feet in MW-102. The depth differences appear normal for this site, and are likely due to slight variations in site topography. The water levels in the wells were higher than those measured in December 2005 by about 2 to 3 feet. The direction and slope of groundwater flow was calculated by linear regression of the available hydrologic data. The groundwater flow direction for March 24, 2005 was 20.35 degrees Azimuth (north-northeasterly) with a slope of 1.56 ft/100ft. This groundwater gradient appears to be shifted somewhat northeasterly from directions noted in previous quarters. However, the gradient calculations are not likely accurate for this quarter as the two overflowing wells (MW-103, MW-104) were assigned arbitrary depth-to-water levels of 0.00 feet. If positive elevations of the overflow conditions had been measured, the gradient calculation would likely shift somewhat westerly, more in conformance with previous gradient directions. See Table 1, Appendix B for the summary of historic gradient data.

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Analytic Data

Four of the site wells were sampled for analysis, including MW-103, MW-104, MW-105, and MW-106. The results of analyses for TPH-G, TPH-D, TPH-MO and BTEX are listed in Table 2, Appendix B. The laboratory reports and chain-of-custody documents are contained in Appendix D. The water samples at wells MW-104, MW-105, and MW-106 were non-detect for the components of TPH-Diesel, and TPH-Motor Oil at the standard report limits of <50 parts per billion (ppb), and <100 ppb, respectively. MW-104 and MW-106 were non-detect for TPH-Gasoline at or above the report limits of 250 ppb. MW-105 was non-detect for TPH-Gasoline at or above the report limit of <500 ppb.

MW-104, MW-105, and MW-106 were non-detect for all of the BTEX constituents, however, the report limits for all BTEX analytes were raised above the standard limits due to sample foaming effects. The report limits for each are listed in Table 2, Appendix B.

The water sample at MW-103 was positive for TPH-G at 81 ppb. TPH-Diesel was non-detect at or above 50 ppb, and TPH-MO was non-detect at or above 100 ppb. The water sample at MW-103 was also positive for Benzene (2.8 ppb), Toluene (2.2 ppb), Ethylbenzene (0.88 ppb), and total Xylenes (2.1 ppb). The response for total Xylenes represents the sum of both Xylene isomers, m,p-Xylene and "o" Xylene. MW-103 was non-detect for MtBE at or above the raised report limit of 0.5 ppb. The TPH-gasoline response at MW-103 for March (81 ppb) was a decrease from that as tested in the previous quarter (December 2005), when the positive response at MW-103 was noted as 940 ppb. The TPH-D response at MW-103 decreased from 51 ppb as noted in the preceding quarter (December, 2005) to the non-detect response (<50 ppb) in this quarter's sampling event. The BTEX responses in March 2005 decreased from the December 2005 responses.

Quality Assurance/Quality Control (QA/QC)

QA/QC for fieldwork was provided by adherence to the Winzler & Kelly Standard Operating Procedures (SOPs) for *Groundwater Level Measurements and Free Phase Hydrocarbon Measurements*, and for *Monitor Well Purging and Sampling Activities* (see W&K SOPs, Appendix E). In addition, all samples were held and transported in a chilled cooler and accompanied by chain-of-custody documentation to a State certified laboratory for analysis, in accordance with EPA protocols. Water samples were accompanied with a Travel Blank for lab analysis to evaluate possible cross-contamination during sample handling and shipping.

The Laboratory QA/QC included the analysis of clean Method Blank samples for each analyte to verify the absence of false positive analyses. False positive results can result from residual (background) contaminants in the analytic equipment. All of the Method Blank analyses were non-detect.

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The laboratory analyzed Laboratory Control Spike (LCS) samples of "spiked" blanks to evaluate the "percent recovery" for all the project analytes. All analytes were within acceptable EPA limits. LCS Duplicates (LCSD) were also analyzed to verify the reproducibility of analytic results. All analytes were within acceptable EPA limits.

The laboratory also analyzed Matrix Spike and Matrix Spike Duplicates, which are the analyses of known analyte spikes in an actual sample matrix, either job specific, or on a batch basis. This is used to evaluate the percentage recovery and % RPD of target analytes and analytic procedures, respectively. All Matrix Spike results were within the acceptable range limits with the exception of those for the analysis of MtBE. The MS and MSD values were outside of the acceptable ranges for this analyte, however, the MtBE analyses were accepted on the basis of the LCS and LCSD data.

The Laboratory noted that the BTEX analytic report limits for all of the samples and the TPH-G analysis report limit for MW-104, MW-10, AMD MW-106 were raised above the standard report limits due to analytic interference from sample foaming. This foaming was discussed with the laboratory; however, the cause has not been determined.

Conclusions

- The groundwater gradient direction for March 2005 was to the northeast (Azimuth 20.38). This is somewhat inconsistent with that of most previous quarters. Two of the six wells were over-flowing when monitored in March, due to very high groundwater levels, and their groundwater elevations were therefore estimated, which likely affected the determination of the gradient.
- The March 2005 analytical data indicate continued hydrocarbon impacts to the groundwater at well MW-103. March 2005 analytical data from wells MW-104, MW-105, and MW-106 did not produce reportable results for any tested hydrocarbons.
- Although petroleum-like odors and sheens were noted on waters purged from most of the site monitor wells, these effects are not necessarily due to petroleum hydrocarbons. Such effects, including hydrogen sulfide odors, can be generated from organic sources and natural reducing conditions, often generating a "sewage" like odor. The low dissolved oxygen measurements at these wells may indicate a general lack of free oxygen.

Recommendations/Schedule

- This report will be submitted electronically to the State Water Resources Control Board Geotracker system (Global ID #0602300340) by June 30, 2006.
- The next quarterly monitoring event, for the Second Quarter 2006, is scheduled for June, 2006.

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- A workplan has been requested by the Humboldt County Division of Environmental Health is in preparation to complete lateral and vertical delineation and characterization of contaminants in the vicinity of MW-103. This work is a prerequisite for preparation of a corrective action plan.

- A Corrective Action Plan has been requested to compare and determine the most cost effective, and feasible method for remediation of soil and groundwater associated with the former bus garage USTs in the vicinity of MW-103.

Should you have any questions regarding any of this information, please do not hesitate to call Terry Clark or Kenneth Thiessen at this office, (707) 443-8326.

Sincerely,
WINZLER & KELLY

Prepared by

Terry Clark
Project Geologist

Reviewed by

Kenneth Thiessen, R.G. #7020
Senior Geologist

REGISTERED GEOLOGIST
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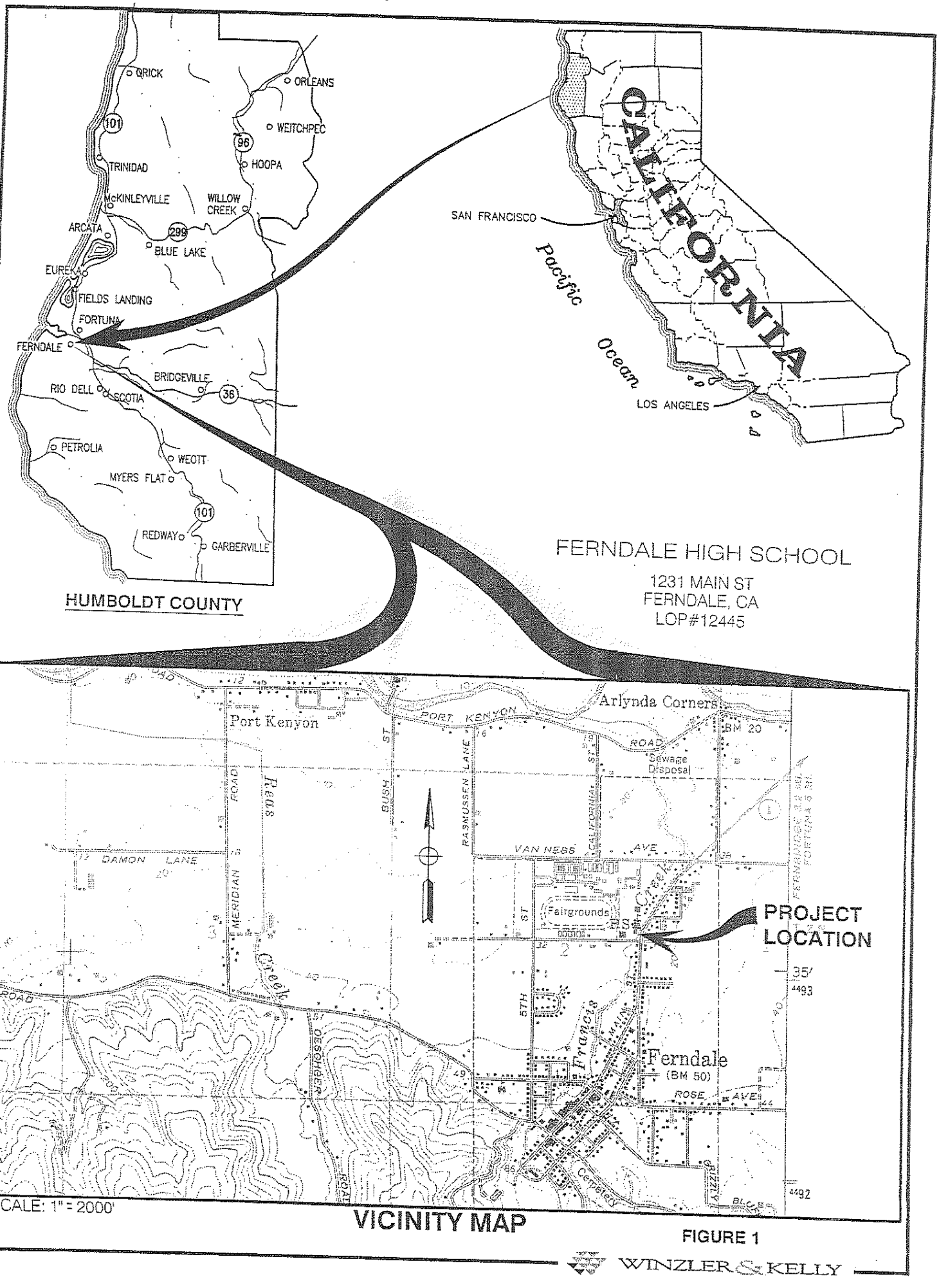
tc

Enclosures

c: Mr. Alan Brainerd, Ferndale Union High School, 1231 Main Street, Ferndale, CA 95536

Appendix A
Figures



SCALE: 1" = 2000'

VICINITY MAP

FIGURE 1

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Appendix B
Tables

TABLE 1
QUARTERLY HYDROGRAPHIC DATA
Ferndale High School
LOP # 12445

Date	Well Number	Top of Casing (ft)	A Depth to Water (ft)	Groundwater Elevation (ft)	B Depth to Product (ft)	(A-B=C) Product Thickness (ft)	D Correction Factor (C x 0.729*)	A-D Equiv. Depth to Water (ft)	Dissolved Oxygen (mg/l)	Direction of Gradient (Azimuth)	Gradient Slope (ft / 100 ft)
01-Dec-04	MW-101	32.34	5.97	26.37	None	0.00	0.00	5.97	NT	338.89	1.36
	MW-102	34.11	5.91	28.20	None	0.00	0.00	5.91	NT		
	MW-103	34.29	4.95	29.34	None	0.00	0.00	6.61	NT		
	MW-104	36.41	6.61	29.80	None	0.00	0.00	4.95	NT		
10-Mar-05[1]	MW-101	35.17	1.43	33.74	None	0.00	0.00	1.43	NT	316.30	1.35
	MW-102	36.93	2.66	34.27	None	0.00	0.00	2.66	NT		
	MW-103	37.12	1.27	35.85	None	0.00	0.00	1.27	NT		
	MW-104	39.22	2.98	36.24	None	0.00	0.00	2.98	NT		
	MW-105	38.58	2.20	36.38	None	0.00	0.00	2.20	NT		
	MW-106	36.34	1.34	35.00	None	0.00	0.00	1.34	NT		
13-Jun-05	MW-101	35.17	4.24	30.93	None	0.00	0.00	4.24	3.4	344.54	1.62
	MW-102	36.93	5.73	31.20	None	0.00	0.00	5.73	3.8		
	MW-103	37.12	3.04	34.08	None	0.00	0.00	3.04	0.4		
	MW-104	39.22	4.47	34.75	None	0.00	0.00	4.47	0.6		
	MW-105	38.58	4.03	34.55	None	0.00	0.00	4.03	0.2		
	MW-106	36.34	3.21	33.13	None	0.00	0.00	3.21	0.8		
21-Sep-05	MW-101	35.17	6.35	28.82	None	0.00	0.00	6.35	0.3	7.59	1.53
	MW-102	36.93	7.79	29.14	None	0.00	0.00	7.79	0.9		
	MW-103	37.12	5.27	31.85	None	0.00	0.00	5.27	0.3		
	MW-104	39.22	6.75	32.47	None	0.00	0.00	6.75	1.5		
	MW-105	38.58	6.35	32.23	None	0.00	0.00	6.35	0.5		
	MW-106	36.34	5.04	31.30	None	0.00	0.00	5.04	1.4		
19-Dec-05	MW-101	35.17	3.04	32.13	None	0.00	0.00	3.04	0.2	318.44	1.12
	MW-102	36.93	4.63	32.30	None	0.00	0.00	4.63	0.2		
	MW-103	37.12	3.34	33.78	None	0.00	0.00	3.34	0.7		
	MW-104	39.22	4.84	34.38	None	0.00	0.00	4.84	1.2		
	MW-105	38.58	4.41	34.17	None	0.00	0.00	4.41	0.5		
	MW-106	36.34	3.17	33.17	None	0.00	0.00	3.17	0.7		
24-Mar-06	MW-101	35.17	1.05	34.12	None	0.00	0.00	1.05	0.3	20.38	1.56
	MW-102	36.93	2.64	34.29	None	0.00	0.00	2.64	0.2		
	MW-103	37.12	0.00	37.12	None	0.00	0.00	0.00	0.2		
	MW-104	39.22	2.13	37.09	None	0.00	0.00	2.13	0.3		
	MW-105	38.58	1.17	37.41	None	0.00	0.00	1.17	1.1		
	MW-106	36.34	0.00	36.34	None	0.00	0.00	0.00	0.4		

*0.729 is the density of gasoline at 15°C as referenced in the API Publication 1628, Second Edition, August, 1989

[1] All six wells were re-surveyed by GPS and set to NAVD 88 vertical datum

NT = Not Tested

TABLE 2
QUARTERLY WATER ANALYSIS
Ferndale High School,
LOP #12445

All results in parts per billion (ppb, ug/l) with the exception of August 2002 lead analysis, which is in ppm, (mg/l)

Well/Boring ID	Date	TPH-D (ppb)	TPH-MO (ppb)	TPH-G (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes * (ppb)	MTBE (ppb)	(DIPE) Diisopropyl-ether (ppb)	(ETBE) Ethyl-t-butyl ether (ppb)	(TAME) Tert-amyl methyl ether (ppb)	(TBA) Tert-butanol (ppb)	Methanol (ppb)	Ethanol (ppb)	1,2 Dichloro-ethane (ppb)	1,2 Dibromo-ethane (ppb)	Chloro-benzene (ppb)	1,3-Dichloro-benzene (ppb)	1,4-Dichloro benzene (ppb)	1,2-Dichloro-benzene (ppb)
MW-101	13-Aug-02	<50	<100	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<5.0	<50	9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	2-Dec-02	<50	NT	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<1.0	<5.0	52	<5.0	NT	NT	NT	NT	NT	NT
	6-Mar-03	<50	< 100	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	28-May-03	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	5-Sep-03	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	1-Dec-03	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	31-Mar-04	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	8-Jun-04	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	9-Sep-04	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	1-Dec-04	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	10-Mar-05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	13-Jun-05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	21-Sep-05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	14-Dec-05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	24-Mar-06	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-102	13-Aug-02	<50	<100	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<5.0	<50	9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	2-Dec-02	<50	NT	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<1.0	<5.0	240	17	NT	NT	NT	NT	NT	NT
	6-Mar-03	<50	< 100	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	28-May-03	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	5-Sep-03	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	1-Dec-03	<50	< 170	<50	0.95	<0.50	0.77	1.1	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	31-Mar-04	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	8-Jun-04	<50	< 170	<50	<0.50	<0.50	<0.50	0.64	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	10-Sep-04	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	1-Dec-04	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	10-Mar-05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	13-Jun-05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	21-Sep-05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	14-Dec-05	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	24-Mar-06	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

TABLE 2
QUARTERLY WATER ANALYSIS
Ferndale High School,
LOP #12445

All results in parts per billion (ppb or ug/l) with the exception of August 2002 lead analysis, which is in parts per million (ppm, mg/l)

Well/Boring ID	Date	TPH-D (ppb)	TPH-MO (ppb)	TPH-G (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes * (ppb)	MTBE (ppb)	(DIPE) Diisopropyl-ether (ppb)	(ETBE) Ethyl-t-butyl ether (ppb)	(TAME) Tert-amyl methyl ether (ppb)	(TBA) Tert-butanol (ppb)	Methanol (ppb)	Ethanol (ppb)	1,2 Dichloro-ethane (ppb)	1,2 Dibromo-ethane (ppb)	Chloro-benzene (ppb)	1,3-Dichloro-benzene (ppb)	1,4-Dichloro-benzene (ppb)	1,2-Dichloro-benzene (ppb)
MW-103	13-Aug-02	<50	<100	77	4.3	2.3	0.98	3.90	<0.50	<0.50	<0.50	<0.50	<5.0	<50	16	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	2-Dec-02	<50	NT	1,700	280	190	43	149	<3.0	<3.0	<3.0	<3.0	<30	120	9.3	NT	NT	NT	NT	NT	NT
	6-Mar-03	<50	<100	510	53	33	16	61	<3.0	NT	NT	NT	NT	NT	NT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
	28-May-03	<50	< 170	470	28	7.3	11	22.8	<9.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1.0	<1.0	<1.0
	5-Sep-03	150	< 170	2,700	600/450[3]	140/120[3]	110/85[3]	460/342[3]	<50	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1.0	<1.0	<1.0
	1-Dec-03	140	< 170	2,500	380	100	64	236	<30	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1.0	<1.0	<1.0
	31-Mar-04	<50	< 170	65	8.5	3.4	<0.50	5.2	<30	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1.0	<1.0	<1.0
	8-Jun-04	120	< 170	1,700	380	38	74	324	<30	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1.0	<1.0	<1.0
	9-Sep-04	130	<170	1,800	320	19	37	167	<30	NT	NT	NT	NT	NT	NT	NT	NT	NT	<1.0	<1.0	<1.0
	1-Dec-04	96	<170	1,100	230	26	24	106	<30	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	10-Mar-05	<50	<170	130	8.2	6.9	3.3	13.5	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	13-Jun-05	<50	<100	1,500	200	41	33	240	<2.5 [2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	21-Sep-05	<50	<100	1,600	240	7.9	21	160	<2.5 [2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	14-Dec-05	51	<100	940	110	9.8	22	100	<2.5[2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	24-Mar-06	<50	<100	81	2.8	2.2	0.88	2.1	<0.50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-104	13-Aug-02	<50	<100	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<5.0	52	14	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
	2-Dec-02	<50	NT	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<1.0	<5.0	120	14	NT	NT	NT	NT	NT	NT
	6-Mar-03	<50	< 100	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	28-May-03	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	5-Sep-03	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	1-Dec-03	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	31-Mar-04	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	8-Jun-04	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	9-Sep-04	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	1-Dec-04	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	10-Mar-05	<50	< 170	<50	<0.50	<0.50	<0.50	<1.0	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	13-Jun-05	<50	<100	<100	<0.60 [2]	<0.60 [2]	<1.0 [2]	<1.0 [2]	<1.0 [2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	21-Sep-05	<50	<100	<50	<0.30	<0.30	<0.50	<0.50	<0.50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	14-Dec-05	<50	<100	<250[2]	<1.5[2]	<1.5[2]	<2.5[2]	<2.5[2]	<2.5[2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	24-Mar-06	<50	<100	<250	<1.5[2]	<1.5[2]	<2.5[2]	<2.5[2]	<2.5[2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-105	10-Mar-05	<50	<170	<50	<0.50	<0.50	<2.5	<0.50	<3.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	13-Jun-05	<50	<100	<100	<1.5 [2]	<1.5 [2]	<2.5 [2]	<2.5 [2]	<2.5 [2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	21-Sep-05	<50	<100	<100	<0.60 [2]	<0.60 [2]	<1.0 [2]	<1.0 [2]	<1.0 [2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	14-Dec-05	<50	<100	<100	<0.60[2]	<0.60[2]	<1.0[2]	<1.0[2]	<1.0[2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	24-Mar-06	<50	<100	<500	<3.0	<3.0	<5.0	<5.0	<5.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
MW-106	10-Mar-05	<50	<170	<50	<0.50 [2]	<0.50 [2]	<0.50 [2]	<0.50 [2]	<3.0 [2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	13-Jun-05	<50	<100	<100	<0.60 [2]	<0.60 [2]	<1.0 [2]	<1.0 [2]	<1.0 2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	21-Sep-05	<50	<100	<50	<0.30	<0.30	<0.50	<0.50	<0.50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	14-Dec-05	<50	<100	<100	<0.60[2]	<0.60[2]	<1.0[2]	<1.0[2]	<1.0[2]	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	24-Mar-06	<50	<100	<250	<1.5	<1.5	<2.5	<2.5	<2.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

For dates up to and including March 10, 2005, TPH-Diesel/TPH-Motor Oil by analysis by EPA Method 3510/8015 Modified, TPH-G and BTEX analysis by EPA Method 8021B, analysis of 7 oxygenates and 6 lead scavengers by EPA Method 8260B.

For dates including and after June 13, 2005, TPH-Diesel/TPH-Motor Oil by analysis by Method 8015DRO (Luft), TPH-G analysis by 8260 GRO, and BTEX analysis by EPA Method 8260.

* Total Xylenes include results of m,p Xylene and "o" Xylene as reported by the laboratory.

[1] Results in the diesel organics range primarily due to overlap from a gasoline range product.

[2] The Reporting Limit for this analyte has been raised to account for matrix interference, including sample foaming

[3] Two analysis of BTEX performed, both by EPA Method 8021B

NT =-Not Tested

Appendix C
Field Notes

WATER LEVEL MEASUREMENT DATA SHEET

142958

PROJECT NAME: Ferndale High
PROJECT NUMBER: 001071.01.11013

TODAY'S DATE: 3-24-06
FIELD PERSONNEL: CA

WELL NUMBER	OPEN WELL	INITIAL WATER LEVEL		FINAL WATER LEVEL		COMMENTS
	Time	Time	Depth to Water (ft bgs)	Time	Depth to Water (ft bgs)	
MW-101	7:45	8:40	1.05	0.3mg/L		
MW-102	7:50	8:45	2.64	0.2mg/L		
MW-104	7:55	8:51	2.13	0.3mg/L		14.88
MW-105	8:01	8:57	1.17	1.1mg/L		15'
MW-106	8:07	9:02	Overflow	0.4mg/L		15
MW-103	8:12	9:07	Overflow	0.2mg/L		15

Weather Conditions Today: Cloudy

FORMS\W20LVL

WINZLER & KELLY
Consulting Engineering

SUBJECT NAME: Fern High
PROJECT NUMBER: 00107101.11013
WELL DESIGNATION: MW-103

PROJECT DATE: 3-24-06
SAMPLER:
SAMPLE NUMBER MW-103

CONDITION OF WELL HEAD/VAULT/CAP & LOCK
A. TOP OF CASING ELEVATION
B. DEPTH TO GROUNDWATER (initial) Overflow
C. DEPTH OF WELL MEASURED 15'
D. HEIGHT OF WATER COLUMN (C-B)
E. GROUNDWATER ELEVATION (A-B)

CASING DIAMETER: 2" ✓ 3"_____ 4"_____ OTHER_____

CALCULATED WELL VOLUME: DxV= 15 x .163 = 2.44 gal
A. Volume (V) of 2" wall = 0.163 gal/ft
B. Volume (V) of 4" wall = 0.653 gal/ft

ODOR yes SHEEN yes FLOATING PRODUCT THICKNESS no

PUMP TUPE: POLY BAILER_____ STAINLESS BAILER_____
ELECTRIC_____ OTHER_____

PUMP DEPTH:

TIME	GALLONS PURGED	NO. OF WELL VOLUMES	PH	TEMPERATURE (°F OR °C)	CONDUCTIVITY (mmhos/cm or µmhos/cm)	TURBIDITY (NTU or visual)
1:55	2	0.82	6.45	16.4	2.89 ms/cm	Cloudy
2:10	4	1.64	6.55	16.5	2.79 ms/cm	
2:22	6	2.46	6.65	17.2	897 us/cm	
2:32	6.75	2.77	6.72	17.2	912 us/cm	
2:45	7	2.87	6.75	17.2	940 us/cm	
2:57	7.25	2.97	6.76	17.2	707 us/cm	
3:09	7.50	3.07	6.75	17.2	681 us/cm	

RECHARGE RATE (qualitative):_____
SAMPLER TYPE: TEFLON BAILER____ ACRYLIC BAILER_____ DISPOSABLE BAILER ____

SAMPLES COLLECTER: PRESERVED VOA'S_____ UNPRESERVED VOA'S_____
PRESERVED LITERS_____ UNPRESERSERVED LITERS_____
500ml PLASTIC BOTTLE WITH PRESERVATIVE FOR METALS:
FILTERED_____ UNFILTERED_____ OTHER_____

COMMENTS_____

8462

WINZLER & KELLY
Consulting Engineering

SUBJECT NAME: Fern High
PROJECT NUMBER: 001071b1.11013
WELL DESIGNATION: MW-104

PROJECT DATE: 3-24-06
SAMPLER:
SAMPLE NUMBER MW-104

CONDITION OF WELL HEAD/VAULT/CAP & LOCK
A. TOP OF CASING ELEVATION
B. DEPTH TO GROUNDWATER (initial) 2.13
C. DEPTH OF WELL MEASURED 14.88
D. HEIGHT OF WATER COLUMN (C-B) 14.88 - 2.13 = 12.75
E. GROUNDWATER ELEVATION (A-B)

CASING DIAMETER: 2" ✓ 3"_____ 4"_____ OTHER_____

CALCULATED WELL VOLUME: DxV= 12.75 x .163 = 2.08 gal
A. Volume (V) of 2" wall = 0.163 gal/ft
B. Volume (V) of 4" wall = 0.653 gal/ft

ODOR no SHEEN no FLOATING PRODUCT THICKNESS no

PUMP TUPE: POLY BAILER_____ STAINLESS BAILER_____
ELECTRIC_____ OTHER_____

PUMP DEPTH:

TIME	GALLONS PURGED	NO. OF WELL VOLUMES	PH	TEMPERATURE (°F OR °C)	CONDUCTIVITY (mmhos/cm or µmhos/cm)	TURBIDITY (NTU or visual)
9:30	2	0.96	6.67	14.5	797 us/cm	clear
9:45	4	1.92	6.74	15.0	807 us/cm	
9:56	5	2.40	6.74	14.9	823 us/cm	
10:06	5.5	2.64	6.73	14.8	623 us/cm	
10:17	5.75	2.76	6.72	14.8	627 us/cm	
10:27	6	2.88	6.71	14.8	626 us/cm	
10:40	6.25	3.0	6.72	14.7	310 us/cm	

RECHARGE RATE (qualitative):_____
SAMPLER TYPE: TEFLON BAILER____ ACRYLIC BAILER_____ DISPOSABLE BAILER ____

SAMPLES COLLECTER: PRESERVED VOA'S_____ UNPRESERVED VOA'S_____
PRESERVED LITERS_____ UNPRESERSERVED LITERS_____
500ml PLASTIC BOTTLE WITH PRESERVATIVE FOR METALS:
FILTERED_____ UNFILTERED_____ OTHER_____

COMMENTS_____

WINZLER & KELLY
Consulting Engineering

SUBJECT NAME: Fern High
PROJECT NUMBER: 001071.01, 11013
WELL DESIGNATION: MW-105

PROJECT DATE: 3-24-06
SAMPLER:
SAMPLE NUMBER MW-105

CONDITION OF WELL HEAD/VAULT/CAP & LOCK
A. TOP OF CASING ELEVATION
B. DEPTH TO GROUNDWATER (initial) 1.17
C. DEPTH OF WELL MEASURED 15'
D. HEIGHT OF WATER COLUMN (C-B) 15' - 1.17 = 13.83
E. GROUNDWATER ELEVATION (A-B)

CASING DIAMETER: 2" ✓ 3"_____ 4"_____ OTHER_____

CALCULATED WELL VOLUME: DxV= 13.83 x .163 = 2.25 gal
A. Volume (V) of 2" wall = 0.163 gal/ft
B. Volume (V) of 4" wall = 0.653 gal/ft

ODOR ? SHEEN yes FLOATING PRODUCT THICKNESS no

PUMP TUPE: POLY BAILER_____ STAINLESS BAILER_____
ELECTRIC_____ OTHER_____

PUMP DEPTH:

TIME	GALLONS PURGED	NO. OF WELL VOLUMES	PH	TEMPERATURE (°F OR °C)	CONDUCTIVITY (mmhos/cm or µmhos/cm)	TURBIDITY (NTU or visual)
11:10	2	0.89	6.30	14.7	701 us/cm	cloudy
11:23	4	1.78	6.47	15.0	709 us/cm	↓
11:35	6	2.67	6.57	15.0	706 us/cm	
11:45	6.25	2.78	6.60	15.2	707 us/cm	
11:57	6.50	2.89	6.64	15.2	672 us/cm	
12:10	6.75	3.0	6.65	15.2	677 us/cm	↓

RECHARGE RATE (qualitative):_____
SAMPLER TYPE: TEFLON BAILER____ ACRYLIC BAILER_____ DISPOSABLE BAILER ____

SAMPLES COLLECTER: PRESERVED VOA'S_____ UNPRESERVED VOA'S_____
PRESERVED LITERS_____ UNPRESERSERVED LITERS_____
500ml PLASTIC BOTTLE WITH PRESERVATIVE FOR METALS:
FILTERED_____ UNFILTERED_____ OTHER_____

COMMENTS_____

WINZLER & KELLY
Consulting Engineering

SUBJECT NAME: Fern High
PROJECT NUMBER: 00107.101.11013
WELL DESIGNATION: MW-106

PROJECT DATE: 3-24-06
SAMPLER:
SAMPLE NUMBER MW-106

CONDITION OF WELL HEAD/VAULT/CAP & LOCK
A. TOP OF CASING ELEVATION
B. DEPTH TO GROUNDWATER (initial) overFlow
C. DEPTH OF WELL MEASURED 15'
D. HEIGHT OF WATER COLUMN (C-B)
E. GROUNDWATER ELEVATION (A-B)

CASING DIAMETER: 2" ✓ 3"_____ 4"_____ OTHER_____

CALCULATED WELL VOLUME: DxV= 15' x .163 = 2.44
A. Volume (V) of 2" wall = 0.163 gal/ft
B. Volume (V) of 4" wall = 0.653 gal/ft

ODOR ? SHEEN no FLOATING PRODUCT THICKNESS no

PUMP TUPE: POLY BAILER_____ STAINLESS BAILER_____
ELECTRIC_____ OTHER_____

PUMP DEPTH:

TIME	GALLONS PURGED	NO. OF WELL VOLUMES	PH	TEMPERATURE (°F OR °C)	CONDUCTIVITY (mmhos/cm or µmhos/cm)	TURBIDITY (NTU or visual)
12:30	2	0.82	6.26	14.9	902 us/cm	murky
12:43	4	1.64	6.56	15.2	2.87 ms/cm	↓
12:55	6	2.46	6.65	15.2	2.78 ms/cm	
1:05	6.75	2.77	6.65	15.4	2.78 ms/cm	
1:15	7	2.87	6.71	15.4	2.78 ms/cm	
1:27	7.25	2.97	6.74	15.4	2.78 ms/cm	
1:39	7.50	3.07	6.76	15.3	2.79 ms/cm	↓

RECHARGE RATE (qualitative):_____
SAMPLER TYPE: TEFLON BAILER____ ACRYLIC BAILER_____ DISPOSABLE BAILER____

SAMPLES COLLECTER: PRESERVED VOA'S_____ UNPRESERVED VOA'S_____
PRESERVED LITERS_____ UNPRESERSERVED LITERS_____
500ml PLASTIC BOTTLE WITH PRESERVATIVE FOR METALS:
FILTERED_____ UNFILTERED_____ OTHER_____

COMMENTS_____

Appendix D
Laboratory Reports and Chain-of-Custody Forms

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

10 April 2006

Winzler & Kelly - Eureka
Attn: Terry Clark
633 Third Street
Eureka, CA 95501-0417
RE: Ferndale High School
Work Order: A603790

Enclosed are the results of analyses for samples received by the laboratory on 03/28/06 15:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nena M. Burgess For Sheri L. Speaks
Project Manager

This represents an amended copy of the original report

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Winzler & Kelly - Eureka
633 Third Street
Eureka, CA 95501-0417
Attn: Terry Clark

Report Date: 04/10/06 16:23
Project No: Job # 00107101.11013
Project ID: Ferndale High School

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A603790	03/28/2006 15:05	WINKEL	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-104	A603790-01	Water	03/24/06 12:22	03/28/06 15:05
MW-105	A603790-02	Water	03/24/06 13:45	03/28/06 15:05
MW-106	A603790-03	Water	03/24/06 15:33	03/28/06 15:05
MW-103	A603790-04	Water	03/24/06 16:12	03/28/06 15:05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove
Laboratory Director

4/10/2006

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Winzler & Kelly - Eureka
633 Third Street
Eureka, CA 95501-0417
Attn: Terry Clark

Report Date: 04/10/06 16:23
Project No: Job # 00107101.11013
Project ID: Ferndale High School

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A603790	03/28/2006 15:05	WINKEL	

Alpha Analytical Laboratories, Inc.

	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT		PQL	NOTE
MW-104 (A603790-01)			**Sample Type: Water**			**Sampled: 03/24/06 12:22**			
TPH by EPA/LUFT GC/GCMS Methods									
TPH as Diesel	8015DRO	AD60716	04/07/06	04/07/06	1	ND ug/l		50	
TPH as Gasoline	8260GRO	AD60315	04/02/06	04/03/06	5	ND "		250	
TPH as Motor Oil	8015DRO	AD60716	04/07/06	04/07/06	1	ND "		100	
Surrogate: Tetratetracontane	"	"	"	"		*46.6 %*	*20-152*		
Surrogate: Toluene-d8	*8260GRO*	*AD60315*	*04/02/06*	*04/03/06*		*88.8 %*	*79-141*		
Volatile Organic Compounds by EPA Method 8260B									**R-04**
Benzene	EPA 8260B	AD60406	"	04/03/06	5	ND ug/l		1.5	
Toluene	"	"	"	"	"	ND "		1.5	
Ethylbenzene	"	"	"	"	"	ND "		2.5	
Xylenes (total)	"	"	"	"	"	ND "		2.5	
Methyl tert-butyl ether	"	"	"	"	"	ND "		2.5	
Surrogate: Bromofluorobenzene	"	"	"	"		*100 %*	*70-130*		
Surrogate: Dibromofluoromethane	"	"	"	"		*86.4 %*	*71-136*		
Surrogate: Toluene-d8	"	"	"	"		*88.8 %*	*80-130*		
MW-105 (A603790-02)			**Sample Type: Water**			**Sampled: 03/24/06 13:45**			
TPH by EPA/LUFT GC/GCMS Methods									
TPH as Diesel	8015DRO	AD60716	04/07/06	04/08/06	1	ND ug/l		50	
TPH as Gasoline	8260GRO	AD60315	04/02/06	04/03/06	10	ND "		500	
TPH as Motor Oil	8015DRO	AD60716	04/07/06	04/08/06	1	ND "		100	
Surrogate: Tetratetracontane	"	"	"	"		*54.9 %*	*20-152*		
Surrogate: Toluene-d8	*8260GRO*	*AD60315*	*04/02/06*	*04/03/06*		*89.2 %*	*79-141*		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove
Laboratory Director

4/10/2006

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208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Winzler & Kelly - Eureka
633 Third Street
Eureka, CA 95501-0417
Attn: Terry Clark

Report Date: 04/10/06 16:23
Project No: Job # 00107101.11013
Project ID: Ferndale High School

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A603790	03/28/2006 15:05	WINKEL	

Alpha Analytical Laboratories, Inc.

	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT		PQL	NOTE
MW-105 (A603790-02)			**Sample Type: Water**			**Sampled: 03/24/06 13:45**			
Volatile Organic Compounds by EPA Method 8260B									**R-04**
Benzene	EPA 8260B	AD60406	"	04/03/06	10	ND ug/l		3.0	
Toluene	"	"	"	"	"	ND "		3.0	
Ethylbenzene	"	"	"	"	"	ND "		5.0	
Xylenes (total)	"	"	"	"	"	ND "		5.0	
Methyl tert-butyl ether	"	"	"	"	"	ND "		5.0	
Surrogate: Bromofluorobenzene	"	"	"	"		*99.2 %*	*70-130*		
Surrogate: Dibromofluoromethane	"	"	"	"		*89.6 %*	*71-136*		
Surrogate: Toluene-d8	"	"	"	"		*89.2 %*	*80-130*		
MW-106 (A603790-03)			**Sample Type: Water**			**Sampled: 03/24/06 15:33**			
TPH by EPA/LUFT GC/GCMS Methods									
TPH as Diesel	8015DRO	AD60716	04/07/06	04/08/06	1	ND ug/l		50	
TPH as Gasoline	8260GRO	AD60315	04/02/06	04/03/06	5	ND "		250	
TPH as Motor Oil	8015DRO	AD60716	04/07/06	04/08/06	1	ND "		100	
Surrogate: Tetratetracontane	"	"	"	"		*42.1 %*	*20-152*		
Surrogate: Toluene-d8	*8260GRO*	*AD60315*	*04/02/06*	*04/03/06*		*88.8 %*	*79-141*		
Volatile Organic Compounds by EPA Method 8260B									**R-04**
Benzene	EPA 8260B	AD60406	"	04/03/06	5	ND ug/l		1.5	
Toluene	"	"	"	"	"	ND "		1.5	
Ethylbenzene	"	"	"	"	"	ND "		2.5	
Xylenes (total)	"	"	"	"	"	ND "		2.5	
Methyl tert-butyl ether	"	"	"	"	"	ND "		2.5	
Surrogate: Bromofluorobenzene	"	"	"	"		*97.6 %*	*70-130*		
Surrogate: Dibromofluoromethane	"	"	"	"		*89.6 %*	*71-136*		
Surrogate: Toluene-d8	"	"	"	"		*88.8 %*	*80-130*		
MW-103 (A603790-04)			**Sample Type: Water**			**Sampled: 03/24/06 16:12**			
TPH by EPA/LUFT GC/GCMS Methods									
TPH as Diesel	8015DRO	AD60716	04/07/06	04/08/06	1	ND ug/l		50	
TPH as Gasoline	8260GRO	AD60315	04/02/06	04/03/06	"	**81** "		**50**	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce L. Gove
Laboratory Director

4/10/2006

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
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CHEMICAL EXAMINATION REPORT

Winzler & Kelly - Eureka
633 Third Street
Eureka, CA 95501-0417
Attn: Terry Clark

Report Date: 04/10/06 16:23
Project No: Job # 00107101.11013
Project ID: Ferndale High School

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A603790	03/28/2006 15:05	WINKEL	

Alpha Analytical Laboratories, Inc.

	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT		PQL	NOTE
MW-103 (A603790-04)			**Sample Type: Water**			**Sampled: 03/24/06 16:12**			
TPH by EPA/LUFT GC/GCMS Methods (cont'd)									
TPH as Motor Oil	8015DRO	AD60716	04/07/06	04/08/06	"	ND "		100	
Surrogate: Tetratetracontane	"	"	"	"		*47.0 %*	*20-152*		
Surrogate: Toluene-d8	*8260GRO*	*AD60315*	*04/02/06*	*04/03/06*		*93.2 %*	*79-141*		
Volatile Organic Compounds by EPA Method 8260B									
Benzene	EPA 8260B	AD60406	"	04/03/06	1	**2.8 ug/l**		**0.30**	
Toluene	"	"	"	"	"	**2.2 "**		**0.30**	
Ethylbenzene	"	"	"	"	"	**0.88 "**		**0.50**	
Xylenes (total)	"	"	"	"	"	**2.1 "**		**0.50**	
Methyl tert-butyl ether	"	"	"	"	"	ND "		0.50	
Surrogate: Bromofluorobenzene	"	"	"	"		*102 %*	*70-130*		
Surrogate: Dibromofluoromethane	"	"	"	"		*84.0 %*	*71-136*		
Surrogate: Toluene-d8	"	"	"	"		*93.2 %*	*80-130*		

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Bruce Gove
Laboratory Director

4/10/2006

Alpha Analytical Laboratories Inc.
208 Mason St. Ukiah, California 95482
e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Winzler & Kelly - Eureka
633 Third Street
Eureka, CA 95501-0417
Attn: Terry Clark

Report Date: 04/10/06 16:23
Project No: Job # 00107101.11013
Project ID: Ferndale High School

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A603790	03/28/2006 15:05	WINKEL	

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AD60315 - VOAs in Water GCMS										
Blank (AD60315-BLK1)				Prepared & Analyzed: 04/02/06						
TPH as Gasoline	ND	50	ug/l							
Surrogate: Toluene-d8	*22.4*		"	*25.0*		*89.6*	*79-141*			
LCS (AD60315-BS1)				Prepared: 04/02/06 Analyzed: 04/03/06						
TPH as Gasoline	176	50	ug/l	200		88.0	75-126			
Surrogate: Toluene-d8	*23.1*		"	*25.0*		*92.4*	*79-141*			
Matrix Spike (AD60315-MS1)	**Source: A603855-01**			Prepared: 04/02/06 Analyzed: 04/03/06						
TPH as Gasoline	494	50	ug/l	200	210	142	32-166			pH
Surrogate: Toluene-d8	*23.4*		"	*25.0*		*93.6*	*79-141*			
Matrix Spike Dup (AD60315-MSD1)	**Source: A603855-01**			Prepared: 04/02/06 Analyzed: 04/03/06						
TPH as Gasoline	525	50	ug/l	200	210	158	32-166	6.08	20	pH
Surrogate: Toluene-d8	*23.6*		"	*25.0*		*94.4*	*79-141*			
Batch AD60716 - EPA 3510B Water										
Blank (AD60716-BLK1)				Prepared & Analyzed: 04/07/06						
TPH as Diesel	ND	50	ug/l							
TPH as Motor Oil	ND	100	"							
Surrogate: Tetratetracontane	*116*		"	*266*		*43.6*	*20-152*			
LCS (AD60716-BS1)				Prepared & Analyzed: 04/07/06						
TPH as Diesel	1930	50	ug/l	2000		96.5	52-136			
TPH as Motor Oil	1920	100	"	2000		96.0	58-138			
Surrogate: Tetratetracontane	*163*		"	*266*		*61.3*	*20-152*			

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Laboratory Director

4/10/2006

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Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A603790	03/28/2006 15:05	WINKEL	

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AD60716 - EPA 3510B Water										
Matrix Spike (AD60716-MS1)	**Source: A603790-01**			Prepared & Analyzed: 04/07/06						
TPH as Diesel	1750	50	ug/l	2000	ND	86.2	61-129			
TPH as Motor Oil	1740	100	"	2000	ND	84.1	47-147			
Surrogate: Tetratetracontane	*141*		"	*266*		*53.0*	*20-152*			
Matrix Spike Dup (AD60716-MSD1)	**Source: A603790-01**			Prepared: 04/07/06 Analyzed: 04/08/06						
TPH as Diesel	1800	50	ug/l	2000	ND	88.6	61-129	2.82	25	
TPH as Motor Oil	1790	100	"	2000	ND	86.6	47-147	2.83	25	
Surrogate: Tetratetracontane	*137*		"	*266*		*51.5*	*20-152*			

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Project ID: Ferndale High School

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A603790	03/28/2006 15:05	WINKEL	

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AD60406 - VOAs in Water GCMS										
Blank (AD60406-BLK1)				Prepared & Analyzed: 04/02/06						
Benzene	ND	0.30	ug/l							
Toluene	ND	0.30	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Surrogate: Bromofluorobenzene	*24.3*		"	*25.0*		*97.2*	*70-130*			
Surrogate: Dibromofluoromethane	*21.2*		"	*25.0*		*84.8*	*71-136*			
Surrogate: Toluene-d8	*22.4*		"	*25.0*		*89.6*	*80-130*			
LCS (AD60406-BS1)				Prepared & Analyzed: 04/02/06						
Benzene	10.1	0.30	ug/l	10.0		101	68-129			
Toluene	10.8	0.30	"	10.0		108	76-137			
Ethylbenzene	10.6	0.50	"	10.0		106	78-136			
Xylenes (total)	30.5	0.50	"	30.0		102	76-134			
Methyl tert-butyl ether	9.13	0.50	"	10.0		91.3	64-141			
Surrogate: Bromofluorobenzene	*23.9*		"	*25.0*		*95.6*	*70-130*			
Surrogate: Dibromofluoromethane	*20.6*		"	*25.0*		*82.4*	*71-136*			
Surrogate: Toluene-d8	*21.7*		"	*25.0*		*86.8*	*80-130*			
Matrix Spike (AD60406-MS1)	**Source: A603855-01**			Prepared & Analyzed: 04/02/06						
Benzene	14.8	0.30	ug/l	10.0	4.5	103	39-142			
Toluene	12.4	0.30	"	10.0	1.7	107	44-148			
Ethylbenzene	17.8	0.50	"	10.0	7.0	108	42-148			
Xylenes (total)	39.8	0.50	"	30.0	8.7	104	43-145			
Methyl tert-butyl ether	381	0.50	"	10.0	100	NR	29-161			QM-4X
Surrogate: Bromofluorobenzene	*24.0*		"	*25.0*		*96.0*	*70-130*			

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A603790	03/28/2006 15:05	WINKEL	

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AD60406 - VOAs in Water GCMS										
Matrix Spike (AD60406-MS1)		**Source: A603855-01**		Prepared & Analyzed: 04/02/06						
Surrogate: Dibromofluoromethane	*20.5*		"	*25.0*		*82.0*	*71-136*			
Surrogate: Toluene-d8	*21.7*		"	*25.0*		*86.8*	*80-130*			
Matrix Spike Dup (AD60406-MSD1)		**Source: A603855-01**		Prepared & Analyzed: 04/02/06						
Benzene	14.8	0.30	ug/l	10.0	4.5	103	39-142	0.00	25	
Toluene	12.4	0.30	"	10.0	1.7	107	44-148	0.00	25	
Ethylbenzene	17.8	0.50	"	10.0	7.0	108	42-148	0.00	25	
Xylenes (total)	40.1	0.50	"	30.0	8.7	105	43-145	0.751	25	
Methyl tert-butyl ether	386	0.50	"	10.0	100	NR	29-161	1.30	25	QM-4X
Surrogate: Bromofluorobenzene	*23.7*		"	*25.0*		*94.8*	*70-130*			
Surrogate: Dibromofluoromethane	*20.4*		"	*25.0*		*81.6*	*71-136*			
Surrogate: Toluene-d8	*21.8*		"	*25.0*		*87.2*	*80-130*			

Bruce Gove
Laboratory Director

4/10/2006

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Project No: Job # 00107101.11013
Project ID: Ferndale High School

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
A603790	03/28/2006 15:05	WINKEL	

Notes and Definitions

R-04	The Reporting Limits for this analysis are elevated due to sample foaming.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
pH	pH of sample <2.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
PQL	Practical Quantitation Limit

WORK ORDER
CHAIN OF CUSTODY RECORD

Alpha Analytical Laboratories Inc. • 860 Waugh Lane, H-1, Ukiah, CA 95482 • (707) 468-0401 • FAX (707) 468-5267

DATE 3-27-06 PAGE ____ OF ____

CLIENT'S NAME: Winzler + Kelly	PROJECT MANAGER: Terry Clark
STREET ADDRESS: 633 Third St. CITY: Eureka STATE: CA ZIP: 9550	PHONE NUMBER: (707) 443-8326
PROJECT NAME: Ferndale High School	FAX NUMBER: (707) 444-8330
CONTRACT/PURCHASE ORDER/QUOTE NUMBER: 00107101, 11013	SITE CONTACT:
SIGNATURE OF PERSON AUTHORIZING WORK UNDER TERMS STATED ON REVERSE SIDE OF THIS FORM:	SAMPLED BY: C. Acy

ANALYSES

SAMPLE CONDITION ON RECEIPT:

COLD/ICED? _____

BUBBLES OR AIR SPACE? _____

WERE SAMPLES PRESERVED? _____

SAMPLE NUMBER/IDENTIFICATION	DATE	TIME	LAB SAMPLE NUMBER	SAMPLE TYPE: LIQ	AIR	SOLID	COMP	GRAB	NO. OF CONTS.	TPH-G/BTEX/MTBE (SO 3040/8021B)	TPH-D/MO with Silica Gel clean up (3510/3630/3015D)	EXPLAIN IRREGULARITIES BELOW
MW-104	3/24	12:22		✓					4	X	X	Please do not analyze
MW-105	↓	1:45		✓					4	X	X	QCTB if any sample is
MW-106		3:33		✓					4	X	X	non-detect for all
MW-~~104~~ 103		4:12		✓					4	X	X	volatile analytes
QCTB												(TPH-G/BTEX)
												EDF format - Global
												ID # = T0602300340

RELINQUISHED BY: (SIGNATURE) Carlos Acy	RECEIVED BY: (SIGNATURE) R DeKelty	DATE 3/28/06	TIME 1110
RELINQUISHED BY: (SIGNATURE) R DeKelty 3/28/06 1505	RECEIVED BY: (SIGNATURE) Shon Speaks	DATE 3/28/06	TIME 1505
RELINQUISHED BY: (SIGNATURE)	RECEIVED FOR LABORATORY BY:		
METHOD OF SHIPMENT	AUTHORIZED BY:		

TURN AROUND TIME REQUESTED: 10 TAT

SAMPLE CONTROL OFFICER

SPECIAL INSTRUCTIONS

DRIVING TIME | SITE TIME | TOTAL TIME

SAMPLE DESPOSITION:

1. STORAGE TIME REQUESTED _____ DAYS (SAMPLES WILL BE STORED FOR 30 DAYS WITHOUT ADDITIONAL CHARGES: THEREAFTER STORAGE CHARGES WILL BE BILLED AT THE PUBLISHED RATES.)
2. SAMPLE TO BE RETURNED TO CLIENT? ☐ YES ☐ NO

HAZARDOUS MATERIALS ARE THE PROPERTY OF THE CLIENT. THE CLIENT IS RESPONSIBLE FOR PROPER DISPOSAL OF HAZARDOUS WASTES. CLIENTS NOT PICKING UP HAZARDOUS WASTES MAY BE ASSESSED AN APPROPRIATE FEE.

Appendix E
W & K's Standard Operating Procedures

WINZLER & KELLY CONSULTING ENGINEERS

STANDARD OPERATING PROCEDURES GROUNDWATER LEVEL MEASUREMENTS AND FREE PHASE HYDROCARBON MEASUREMENTS

1. Objective

To establish accepted procedures for detecting free-phase hydrocarbons and measuring groundwater levels in monitoring wells.

2. Background

Any time water levels are required to determine the groundwater flow gradient or flow direction, water levels are collected. Wells are tested for free-phase hydrocarbons prior to insertion of electronic water level probes or purge pumps the First time a well is sampled and in any well that has a history of free-phase hydrocarbons.

3. Personnel Required and Responsibilities

Project Manager: The Project Manager (PM) is responsible for ensuring that field personnel have been trained in these procedures and for verifying that water levels have been collected in compliance with this SOP.

Field Technician: The Field Technician is responsible for complying with this SOP, including determining if there are free phase hydrocarbons in the well, the thickness (if it exists) and the stabilized water level in the well.

4. Equipment Required

- Water level/free phase hydrocarbon indicator probe or pastes
- Tape measure
- Water Level Data Form/pencil
- Watch
- Disposable gloves
- Distilled water
- Alconox soap
- Containers to hold rinsate water
- Site Safety Plan and Hospital Map
- Keys to wells
- Tools to open wells

5. Procedure

After reviewing the Site Safety Plan and determining the type and concentrations of contaminants that may be present on site, the field personnel will don the proper level of personal protection prior to opening any wells.

Open all monitoring wells to be measured and remove expandable caps. Allow wells to equilibrate 5 to 15 minutes. Record time and visual observations regarding well access, condition, security, etc on water level data sheet.

5a. Alternative procedure for electronic water-level/free-phase hydrocarbon indicator

- Decontaminate probe with potable water and alconox mix. Rinse with distilled water.
- Lower probe into the well and determine the presence of any free-phase hydrocarbons. The probe will emit a continuous sound if free product is present. If no product is present, the probe will make an oscillating (beeping) sound when it encounters water. Record the depth of free-phase hydrocarbons on the water level data sheet. If no free-phase hydrocarbons are present, record the water depth. DO NOT SUBMERGE THE PROBE THROUGH THE FLOATING PRODUCT LAYER.
- Gradient calculations shall then be performed by calculation of the groundwater elevation by:
- GW ELEV = (TOC) - (depth to water).
- TOC indicates top of casing elevation as surveyed.
- If free-phase hydrocarbons are indicated, determine the depth to water using a steel measuring tape and water indicator paste, by the procedure below.

5b. Alternative procedure for product and water indicator pastes

- Decontaminate tape measure.
- Place **product** indicator paste on bottom two feet of tape measure.
- Lower tape measure into well. Note depth to which the end of the tape is lowered relative to the point of survey mark on the top of the well casing.
- Withdraw the tape. If paste has changed color, free-phase hydrocarbons are present. Calculate depth to the floating layer by:
  - Depth to Product = (depth to which tape lowered into well) - (length of product indicator paste discoloration).
- Remove product indicator paste with paper towel and decontaminate tape measure.
- Apply **water** indicator paste on bottom two feet of tape measure.
- Lower tape into well. Note depth to which end of tape is lowered.
- Withdraw the tape. Calculate the depth to water by:
  - Depth to Water = (depth to which tape lowered into well) - (length of water indicator paste discoloration).
- Obtain the depth to groundwater level readings from the point of survey mark, or from the North side of the top of the casing, if no point of survey mark is present. Readings will be measured to the nearest 0.01 foot. Note time and readings on water level data sheet.
- Use the same measuring device to measure water levels in all wells to be used in the gradient calculation.
- Obtain depth to casing bottom for each well by submerging a tape measure until it reaches the bottom of the well. Readings will be measured to the nearest 0.01 foot. Note readings on data sheet. If sampling is not going to be completed at the site, close and lock all wells.
- Gradient calculations shall then be conducted by making water depth corrections for the presence of free product. First calculate the product thickness:
  - Product Thickness = (Depth to Water) - (Depth to Product).

- Water elevations when free product is present shall then be calculated by:
- GW ELEV = (TOC) - (Depth to Water) - $SG_{product}$ (Product Thickness).
- On any site where monitoring will occur more than once, a free product sample will be collected and measured for specific gravity ($SG_{product}$). In the absence of the site specific free product specific gravity $SG_{product}$ shall be assumed to be 0.78.

WINZLER & KELLY CONSULTING ENGINEERS

STANDARD OPERATING PROCEDURES
for
MONITOR WELL PURGING AND SAMPLING ACTIVITIES

1.0 OBJECTIVE

To establish accepted procedures for the purging and sampling groundwater from monitoring wells, to ensure that representative samples of formation water are collected by accepted methods.

1.1 Background

To obtain a representative groundwater sample from monitor wells, it is necessary to remove (purge) stagnant water from within and near the well prior to sampling. In general, three to seven casing volumes must be removed from the well prior to sampling, to provide a representative sample. Wells may be sampled after purging less than the minimum three volumes if well recharge rates are beyond reasonable time constraints. The specific method of well purging will be decided on a case by case basis, or as required by project specifications.

1.2 Personnel Required and Responsibilities

Project Manager: The Project Manager (PM) is responsible for ensuring that field personnel have been trained in the use of these procedures and for verifying that monitoring well purging and sampling activities are performed in compliance with these SOP's.

Field Technician: The Field Technician is responsible for complying with these SOP's, including the purging and sampling of monitor wells, the safe containerization of extracted waters, the documentation of field procedures, and the handling of samples..

2.0 WELL PURGING ACTIVITIES

2.1 Equipment Required

- Bottom-filling bailer, suction air pump, air-lift pump, gas operated (bladder) pump, submersible pump, or other pumping device
- pH meter
- Conductivity/Temperature Meter
- Water Level Indicator
- Well Sampling Data Sheet
- Indelible marker
- Disposable gloves
- Containers to hold extracted water (as required)

2.2. Purging Procedure

Prior to groundwater sampling, each monitoring well will be purged as described below. Prior to insertion into each well, all equipment will be either decontaminated (following W&K Decontamination procedures) or will be deemed clean or previously unused by the manufacturer.

- Open all monitoring wells to be purged and allow to equilibrate 5 to 15 minutes. Record time and visual observations regarding well access, condition, security, etc. in log book.
- Obtain depth to groundwater level readings according to Winzler & Kelly Standard Operating Procedures for Groundwater Level measurements and Free Phase Hydrocarbon Measurements. Record time and readings on the Well Level Measurement Data Sheet.
- Calculate the volume of standing water in each monitoring well. Record the volume calculated for each well on the Well Sampling Data Sheet.
- Begin purging the well by removing water from the well and collecting in a calibrated container (i.e., 5-gallon bucket marked in 1-gallon increments). The depth, or interval, from which the water is being purged should be noted on the data sheet.
- Obtain readings of field parameters (pH, conductivity, temperature, and turbidity) and make visual observations of color/odor/turbidity at selected intervals (i.e., every gallon, every five gallons, etc.) throughout the purging process. Depending on the calculated volume and the expected number of gallons to be purged, a minimum of five readings should be collected. Record the time, readings, and visual comments on the Purge Data Sheet.
- Continue purging until at least three (minimum) to four well volumes have been removed and the field parameters stabilize to within:

pH	≈0.1
conductivity	≈10%
turbidity	≈10%
temperature	≈1°

  Do not exceed seven well volumes.
- Obtain a final depth to groundwater level measurement prior to collection of the groundwater sample and note the reading and time on the Well Level Measurement Data Sheet. Be sure that the measurement probe has been thoroughly decontaminated prior to insertion into each well. Note any qualitative comments regarding recharge rate of each well, and calculate the percent of the original water column that has recovered at the time of the final depth measurement. It is ideal to attain a minimum of 80% water level recovery prior to sampling, if time constraints allow. Very slow recharge rates may not allow purging the minimum three volumes or 80% recovery; lesser volumes may be used for sampling, as needed and documented.
- Collect a groundwater sample following the directions below under Section 3.0.
- Containerize all purge water and decontamination water in 55-gallon drums. Use yellow indelible markers (storeroom supply) to label all drums on the side with date, contents, origin and other pertinent information. Avoid marking the tops of drums with black marker, such marks are temporary and will soon fade/rust. Note the number, condition and location of drums on site in the field notes.

3.0 WELL SAMPLING ACTIVITIES

3.1 Equipment Required

- Disposable bailer (previously unused) *
- Bottom emptying device (sampling port)
- Monofilament nylon line (min 40-lb test)
- Monitor Well Purge & Sample Data Sheets
- Sample containers (preserved, as required) - provided by the laboratory
- Sample labels
- Indelible marker
- Disposal gloves
- Decontamination soap (Alconox)
- Distilled water for equipment decontamination.

* A variety of sampling techniques are available for the collection of groundwater samples. Except where otherwise required, W&K only utilizes disposable polyethylene bailers to collect groundwater samples.

3.2. Sampling Procedure

Prior to collecting a groundwater sample from a monitoring well, each well must be properly purged in accordance with W&K's SOP for Monitoring Well Purging Activities (See Section 2.0 above), including the measurement of the final water level and documentation of recharge.

- Water from the desired screen interval will be collected by lowering the previously unused disposable, polyethylene, bottom-filling bailer into the well.
- When bailer is completely full, carefully retract the bailer from the well casing.
- Using a previously unused, new, bottom-emptying device, to minimize agitation of the water, transfer the water from the bailer to the sample containers.
- When sampling for volatile constituents (VOA's), the water samples will be collected in 40-ml glass vials (preserved as required by the analyses requested). Precautions will be taken to prevent capturing air bubbles in the vials.
- Upon filling, each vial will be immediately capped with a Teflon septum and plastic screw cap. The vial will be checked for air bubbles by inverting and gently tapping the vial. If any bubbles are visible, the vial will be refilled and confirmed to be free of any air bubbles.
- At a minimum, all samples will be labeled with the following information:

Sample ID	Date and Time Sample Collected
Location	Sampler's Initials
Project Number	Analyses Requested

- Sample information will be documented on the Chain-of-Custody form. All samples will be placed in an ice chest, chilled to a temperature of 4°C. The ice chest will remain in the custody of the sampler until it is transferred to the courier service for delivery at the analytical laboratory for analyses. Any and all transfer of

sample custody must be documented on the Chain-of-Custody form with the name, signature, affiliation, date and time of the persons releasing and receiving custody of the samples.

- Upon completion of the sampling activities, each well shall be closed and secured by replacing the well cap and securing the lock.
- Dispose of gloves, bailers, bottom-emptying devices, and bailing line after each us.

Appendix F
Correspondence/Documents

00107101.1011

Humboldt County Department of Health and Human Services
DIVISION OF ENVIRONMENTAL HEALTH
100 H Street - Suite 100 - Eureka, CA 95501
Voice: 707-445-6215 - Fax: 707-441-5699 - Toll Free: 800-963-9241
envhealth@co.humboldt.ca.us

February 7, 2006

Ferndale School District
Attn: Mr. Alan Brainerd
1231 Main Street
Ferndale, California 95536

Subject: **Ferndale Union High School**
1231 Main Street, Ferndale California
LOP # 12445

Dear Mr. Brainerd:

Thank you for the January 23, 2006 *NORCAL Geophysical Survey* prepared by Winzler & Kelly Consulting Engineers. Winzler & Kelly proposes remedial excavation in the vicinity of the former USTs located near the old bus garage. In previous correspondence, HCDEH concurred with Winzler & Kelly's recommendation to conduct limited subsurface investigation to delineate the extent of soil contamination in the vicinity of the former bus garage USTs and to conduct (interim) remediation with the excavation of contaminated soil.

In order to delineate the extent of soil contamination I recommend Winzler & Kelly prepare a workplan to conduct the subsurface investigation referenced above. To ensure reimbursement with the Underground Storage Tank Cleanup Fund I recommend Winzler & Kelly prepare a corrective action plan comparing remedial alternatives applicable to this site.

Please contact me at 707.268.2239 if you have any questions in this regard.

Sincerely,

Robert A Stone, CHMM
Hazardous Materials Specialist
Local Oversight Program

RS: ar

cc: Terry Clark, Winzler & Kelly Consulting Engineers
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